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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/10/97	08/10/97	FEYGIN	

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EXAMINER

LE, L

ART UNIT	PAPER NUMBER
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1743

DATE MAILED:

04/28/99

Please find below and/or attached an Office communication concerning this application r
proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
08/872,097

Applicant(s)
Feygin et al.

Examiner
Long V. Le

Group Art Unit
1743



☒ Responsive to communication(s) filed on Feb 16, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire THREE month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-43 and 47-65 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-43 and 47-65 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 148 USPQ 459, that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or unobviousness.

3. Claims 1-9, 23-29 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gleave et al. (USP 5,660,727) in view of Panetz et al. (USP 5,585,068).

Gleave et al. disclose a reaction tool substantially as claimed. The system comprises a reaction vessel 101, a reaction vessel support 23, an injection port 106 and an evacuation port 109, each includes a pressure seal 116, and injection and evacuation fittings 161 and 164 for matingly engaging the injection and evacuation ports (figures 4, 6 and 10). Gleave et al. fail to recite a plurality of injection and evacuation ports supported by top and bottom support plates. Panetz et al. teach an apparatus for automatically separating a compound from liquid specimens including a carousel support plate 70 for supporting a plurality of injection ports 75 and 105 and fitting 72

and 107 for engaging with a reaction vessel 50. Such an arrangement would provide a smaller, compact sample preparation apparatus which can prepare samples for further analysis on either a batch or continuous basis quicker and with greater reliability (figures 1, 2, 13, 14, column 2, lines 4-19, and column 3, lines 50-58).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the apparatus of Gleave et al. with a carousel support plate for supporting a plurality of injection ports, as taught by Panetz et al., in order to provide a smaller, compact sample preparation apparatus which can prepare samples for further analysis on either a batch or continuous basis quicker and with greater reliability.

With respect to the bottom carousel fitting plate, one of ordinary skill in the art would have found it obvious to provide an additional support plate in the modified system of Gleave et al., for supporting the evacuation fittings, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

4. Claims 17-22, 29 and 35-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gleave et al. (USP 5,660,727) in view of Averette (USP 5,147,551).

Gleave et al. reference further fails to recite a stirrer motor and a magnet positioned adjacent a sidewall of the reaction vessel. Averette teaches a reaction tool having a stirring motor 223 with a magnet 225 attached its shaft for stirring fluids inside a reaction vessel 250.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the reaction tool of Gleave et al. with a magnet stirrer, as taught by Averette, in order to mix fluids inside the reaction vessel.

With respect to the snap on heater, one of ordinary skill in the art would have found it obvious to separate the heater 208 of Gleave et al. from the system since it has

been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman*, 168 USPQ 177, 179.

5. Claims 48-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gleave et al. (USP 5,660,727) in view of Panetz et al. (USP 5,585,068) as applied to claim 47 above, and further in view of Park et al. (USP 3,715,190).

Gleave et al. and Panetz further fail to recite that the reaction vessel comprising an addition inlet. However, such a multiple inlet reaction vessel is considered conventional in the art, see Park et al. Park et al. teach a reaction vessel for the solid phase peptide synthesis having a plurality of inlets at one end thereof in order to separately insert a solvent and a reagent inside the vessel (figures 1 and 4, and the abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the reaction vessel of Gleave et al. with an additional inlet in order to separately insert a solvent or a reagent inside the reaction vessel.

Allowable Subject Matter

6. Claims 10-16, 30-34 and 41-43 are allowed.

7. The following is a statement of reasons for the indication of allowable subject matter: the prior art neither teaches nor suggests a reaction tool having top and bottom carousel support plates having tapered injection and evacuation through fittings formed in a ring around the periphery thereof.

8. Claims 10-16, 30-34 and 41-43 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

9. Applicants arguments filed February 16, 1999 have been fully considered but they are not persuasive.

Applicants' argue that Gleave et al. and Panetz address a distinctly different context than the present invention, i.e., combinatorial chemical synthesis or universal fluid exchange. This argument is not persuasive because a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).


Conclusion

10. No claims are allowed.

11. References: Judd, Chang et al., Sugarman et al. and Mohan et al. are additionally cited as art of interest for the teaching of reaction tools having a plurality of reaction vessels.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Long V. Le whose telephone number is (703) 305-3399.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0651.


Long V. Le

Primary Patent Examiner, Group Art Unit 1743
April 23, 1999.